

January 25, 2010 12:54:42 PM

Item ID:

D3492-051

Revision ID: Item Name: Plug Assembly

Start Qty: 30.00 Start Date: 1/26/2010

Required Date: 2/5/2010 Req'd Qty: 30.00 Reference:

QC:

Cust Item ID: Customer:

Process Plan: Date: 10 - 1-25 Tooling:

Date:

SPC (Y/N):

Accept

Date:

Date:

Run Start

Setup Start

Stop

Stop



Sequence ID/ Work Center ID Operation Description

Set Up/ **Run Hours**

Draw Number Draw Rev.

Plan Accept Code Qty

Reject Qty

Reject Number Stamp

Insp.

Draw Nbr

Approvals:

Revision Nbr

D3492 Rev C

100

Hardinge

Hardinge CNC LATHE SMALL

Memo

0.00

1-Turn as per Folio FA714 & Dwg D3492\(\text{Dwg Rev:}\)

5/2 10/01/26

110

Hardinge CNC Lathe Small

QC2- Inspect parts off machine FAI/FAIB

0.00

0.00

QC Quality Control

Memo

5000 10/01/26

50 Ø

QC8- Inspect parts - second check

H.A 10/01/26

120

QC

Memo

Quality Control

Dart	Aero	space	Ltd
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	-										
W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		

Part No:		PAR #:	Fault Cate				NCR: Yes No DQA: Date:				
	Res	solution:	Dispositio	n:	_ QA: N/C CI	osed:		Date: _			
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCF	R)					
DATE	STEP	Description of NC		Corrective Action Section		Verifi	Verification Approva				
	OIL!	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date		ion C	Chief Eng	QC Inspector		

January 25, 2010 12:54:42 PM

Required Date: 2/5/2010



Item ID:

D3492-051

Accept

Setup Start

Stop



Page 2

Revision ID:

Item Name: **Start Date:**

Plug Assembly

1/26/2010

Start Qty: 30.00 Req'd Qty: 30.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

0.00

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ **Work Center ID**

130

Small Fab

Small Fab

Operation Description

Small Fab

Memo

Memo

Memo

1-Deburr if necessary □ 2- Tumble

Set Up/ **Run Hours**

5/10/01/26

Draw Draw Number Rev.

Plan Code

Accept Qty

Reject Reject Oty

Number Stamp

B 15-1-28



Quality Control

QC5- Inspect part completeness to step on W/O

0.00

150

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

16k 10-02-01

Dart Aerospace Ltd

	•								
W/O:			WC	RK ORDER CHANG	ES				
DATE	STEP	PRO	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		4-11-11-11-11-11-11-11-11-11-11-11-11-11							
	į								
Part No:		PAR #:	Fault Cate	jory:	NCR: Yes	No DQ	A:	Date: _	
		esolution:				QA: N/C Closed:			
NCR:			WORK ORDE	R NON-CONFORMA	NCE (NCR	3)			
DATE	STEP	Description of NC	Corrective Action		on B		erification App		Approval
		Section A	Chief Eng	Action Description Chief Eng	Date	Secti	on C	Chief Eng	QC Inspector
									1



January 25, 2010 12:54:42 PM

Item ID:

D3492-051

Accept

Setup Start

Stop



Revision ID:

Item Name:

Plug Assembly

Start Date:

Required Date: 2/5/2010

1/26/2010

Start Qty: 30.00 Req'd Qty: 30.00

Cust Item ID:

Customer:

Draw

Number

Reference:

Approvals:

Tooling:

Draw

10/03/10

Rev.

Plan

Code

Start

Run

Accept

Qty

Process Plan: QC: __

Date: Date:

SPC (Y/N):

Set Up/

Run Hours

Date:

Stop

Reject

Qty

Number Stamp

Insp.

Reject

Sequence ID/ Work Center ID

160

Powdercoat

Powder Coating

Operation **Description**

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

11113170

Memo

(Flat End Only) ISTART TIME: 11:00AM TEMPERATURE: 3204 EFINISH TIME:

0.00

OVEN 11:3000

170

QC

Quality Control

QC3- Inspect Part Finish

0.00

BL 10-3-10

Memo

0.00

180

Packaging

Memo

Identify as per dwg & Stock Location: 1

0.00 9 10.3/10/ 50

Packaging

0.00

Dart Aerospace Ltd

W/O:			WO	RK ORDER CHANG	ES					
DATE	STEP	PRO	ROCEDURE CHANGE By Date			Date	Qty	Approval QC Inspector		
-										
			Fault Category: NCR: Yes No DQA:							
	Re	solution:	Disposition	:	QA: N/C	Clos	ed:		Date: _	
NCR:		,	WORK ORDE	R NON-CONFORM	ANCE (N	CR)				
DATE	STEP	Description of NC	NON OF INC		ion B			ation	Approval	Approval
	J.L.	Section A	Initial Chief Eng	Action Description Chief Eng		gn & Section		Section C CI		QC Inspector
								ļ		

Work Order ID 55622

January 25, 2010 12:54:42 PM

Required Date: 2/5/2010



Page 4

Item ID:

D3492-051

Accept

Setup Start

Stop



Revision ID:

Item Name: **Start Date:**

Plug Assembly

1/26/2010

Start Qty: 30.00

Req'd Qty: 30.00

Cust Item ID:

Customer:

Reference:

Tooling:

Date:

Rev.

Run Start

Approvals:

Process Plan:

Date: Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ **Work Center ID**

Operation Description

QC:

QC21- Final Inspection - Work Order Release

Set Up/ **Run Hours**

Draw Number Draw Plan Code

Reject Accept Qty Qty

Reject Number Stamp

Insp.

190

Memo

0.00

0.00

Quality Control

Dart Aerospace	Ltd
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W/O:			WO	RK ORDER CHANG	ES				
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
-			- 1			· · · · · · · · · · · · · · · · · · ·			
Dord No.	1								
		PAR #:							
	Res	solution:	· · · · · · · · · · · · · · · · · · ·					Date:	
NCR:			WORK ORDE	ER NON-CONFORM	ANCE (NCR)			
DATE	STEP	Description of NC		Corrective Action Section B			cation	ion Approval	Approval
	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti	on C	Chief Eng	QC Inspector	
		Mary Company							

Picklist Print

January 25, 2010 12:54:41 PM

Work Order ID: 55622

Parent Item:

D3492-051

Parent Item Name:

Plug Assembly

Comments:

IPP Rev:A New Issue

IPP Rev:B as per Rev C 07-12-06 DD verified by:EC

Start Date: 1/26/2010

Required Date: 2/5/2010

Start Qty: 30.00

Required Oty: 30.00

Component Item ID/ Item Name

Item ID

Replacement Mfg/ Purch Purchased

06-06-20 JLM

Bin Primary Item Location No

Last Location Route Seq ID 100

Unit of Measure Hand

Oty on Remaining 0.0000

Qty To Pick Issued 1.4463

Otv

Date Issued

Status

Page 1

M6061T6R0.875

6061-T6 Round Bar :875"

M 113457

2.7 Rt Sh 10/01/26

6061-16 - R.R. 1.000

Dart	Aer	osi	oace	Ltd
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W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE By D			Date	Qty Approva	Approvar				
		,									
						İ					
		PAR #:	Fault Cate	gory:	NCR: Yes No DQA:			Date:			
		solution:	Disposition	n:	_ QA: N/C Cld	osed:	Date:				
NCR:			WORK ORD	ER NON-CONFORM	ANCE (NCR)		**************************************			
DATE	STED	Description of NC	Corrective Action Section B			Verificat	ion Approva	al Approval			
DAIL	STEP Description of NC Section A	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section					

					·						

DART AEROSPACE LTD	Work Order:	55622
Description: Plug	Part Number:	D3492-11
Inspection Dwg: D3492 Rev: C		Page 1 of 1

	FIRST	ARTICLE IN	SPECTION	ON CHE	CKLIST		
	x	First Artic	le	Proto	otype		
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Co	omments
Ø0.850	+0.010/-0.001	.850					· · · · · ·
Ø0.664	+0.008/-0.001	.663	/				
0.045	+0.000/-0.002	.044					***
0.090	+0.000/-0.002	.089					
0.500	+/-0.010	,500					
0.060	+/-0.005	,060					·
0.060	+/-0.005	.058	/,				-
0.050 x 20°	+/-0.010 x 0.5°	OSUX20°					
		<u> </u>					
Measured by:		Audited by:	H.A		Prototype A		N/A
Date: f	0/01/26	Date:	10/01/2	6		Date:	N/A
Rev Date	Change				Re	vised by	Approved

Measured by:	Audited by: \mathcal{U} , \mathcal{A}	Prototype Approval:	N/A
Date: 10/01/26	Date: 10/0/126	Date:	N/A
Day Date Change			

Rev	Date	Change		Revised by	Approved
Α	08.02.28	New Issue	P/O D3492-049	KJ/DD O	1
					

Dart Aerospace Lt	a
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W/O:			WC	RK ORDER CHANGE	S				
DATE	STEP	PRO		EDURE CHANGE			Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
				- A A A A A A A A A A A A A A A A A A A				Frod Wigi	
				14-31-74					
,									
Part No: PAR #:			Fault Cate	jory:	NCR: Ye	s No D (A:	Date:	
				Disposition: Date: _					
NCR:		V	VORK ORDI	R NON-CONFORMA	NCE (NO	R)	·		
	Description of NC	Corrective Action Section		Verit	ication	Approval	Approval		
DATE	SIEP	STEP Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sigi Da	າ& ∣ _{Sec}	ction C	Chief Eng	QC Inspector

D3492-XX PLUG (SEE TABLE)--NAS1611 PLUG (SEE TABLE)

D3492-XXX PLUG PARTS LIST

5

QTY -041	-043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	PART NUMBER	DESCRIPTION
X							D3492-041	PLUG ASSEMBLY
	X						D3492-043	PLUG ASSEMBLY
		Х					D3492-045	PLUG ASSEMBLY
			Х				D3492-047	PLUG ASSEMBLY
				X			D3492-049	PLUG ASSEMBLY
					Х		D3492-051	PLUG ASSEMBLY
						Х	D3492-053	PLUG ASSEMBLY
1							D3492-1	PLUG
	1						D3492-3	PLUG
	1	1					D3492-5	PLUG
			1				D3492-7	PLUG
				1			D3492-9	PLUG
					1		D3492-11	PLUG
						1	D3492-13	PLUG
		1					NAS1611-005	O-RING
			1				NAS1611-007	O-RING
1							NAS1611-010	O-RING
						1	NAS1611-012	O-RING
	1						NAS1611-013	O-RING
					1		NAS1611-015	O-RING
				1			NAS1611-016	O-RING

<u>&</u> & &

 ${\underline{\sf NOTES}}_{:}$ 1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX



С

DEO ATTACHED

С	ADD -04	9/-051/-053, CH	ANGE DRAWING FORMAT	PH	07.10.05		
8	ADD -04	7; UP[:ATE DIN	A FOR -045	PH	06.05.11		
Α	NEW ISS	SUE	PH	06.01.04			
REV.	DESCRI	PTION	BY	DATE			
DESIG	N	N/	DART AERO	SPACEL	TD		
DRAW	N	PH	HAWKESBURY, ONTARIO, CANADA				
CHECK	KED		DRAWING NO.		REV. C		
MFG. A	PPR.	1	D3492		SHEET 1 OF 2		
APPRO	OVED	VED TITLE			SCALE		
DE APPR.		#	PLUG		2:1		
DATE 07.10.05			COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRINKE AND COMPONENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE ON COPYED OR COMMUNICATION TO ANY POPEON WITHOUT WITH PERSONS OF MEDIO DART APPOSPACE IT TO				

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W/O:			\\ <u>\</u>	DV ODDED OUTLI	=-				
W/U:			WC	RK ORDER CHANG	<u>ES</u>			T	,
DATE	STEP	PR	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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	<u> </u>		-·· <u>-</u>						
Part No.		DAD #	F1-0-1-						
Part NO				Fault Category: NCR: Yes No					
	Re	esolution:						Date: _	
NCR:			WORK ORDE	ER NON-CONFORMA	ANCE (NC	₹)			
DATE	STEP	Description of NC		Corrective Action Section B			cation	Approval	Approval
	JOIL!	Section A	Initial Chief Eng	Action Description Chief Eng	Sign of Date	& Sect	ion C	Chief Eng	QC Inspector
	}								
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1	1		1 1			į			·



8 3 0.060±0.005 --0.090+0.000 ØΒ D D -0.002 c+0.000 -0.002 CHAMFER 0.050 X 20° **DETAIL D** POWDER COAT THESE FACES ONLY PER NOTE 2 0.060±0.005 0.500±0.010 MASK PRIOR C С TO PAINT) D3492-XX PLUG D3492-XX PLUG MACHINING DETAILS MATERIAL SPEC P/N С В Α D3492-1 0.625 0.394 0.055 M6061T6R0.625 D3492-3 0.750 0.582 M6061T6R0.750 0.045 D3492-5 0.375 0.188 0.045 M6061T6R0.375 D3492-7 0.500 0.270 0.045 M6061T6R0.500 D3492-9 0.938 0.750 0.045 M6061T6R1.000 D3492-11 0.850 0.664 0.045 M6061T6R0.875 D3492-13 0.750 0.520 0.045 M6061T6R0.750 DEO ATTACHED

NOTES:
1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100) (REF. DART MATERIAL SPEC M606115R0.000)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A

- 6) IDENTIFICATION: N/A 7) WEIGHT: N/A

8

DART AEROSPACE LTD REV. C SHEET 2 OF 2

DESIGN DRAWN HAWKESBURY, ONTARIO, CANADA DRAWING NO. CHECKED D3492 MFG. APPR. TITLE **APPROVED** SCALE **PLUG** DE APPR 4:1 COPYRIGHT © 2007 BY DART AEROSPACE LTD.
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Dart	Aeros	pace	Ltd

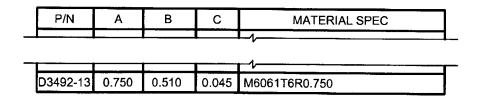
		— - 							
W/O:			W	ORK ORDER CHANGE	ES				
DATE	STEP	PRO	PROCEDURE CHANGE					Approval Chief Eng / Prod Mgr	Approval QC Inspector
							1.50	; [
			-						
Part No	:	PAR #:	Fault Category: NCR: Yes No DQ				DQA: Date:		
	Re	solution:	Disposition: QA:			QA: N/C Closed: Date:			
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCI	₹)	9.00		
DATE	STEP	Description of NC	1	n B	Verific	cation	1 Approval	Approval	
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign of Date		on C	Chief Eng	QC Inspector
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DRAWING	NO.	TITLE		REV. C	DART AEROSPACE LT	D D.E.O. NO.	SHEET NO.	SCALE
D3492		PLUG			ENGINEERING ORDER		SHEET 1 OF 1	NTS
DRAWN	AJS		CHECKED	1/2	MFG. APPR. &	APPROVED /	DE APPR.	
DATE	08.11.	.05	DATE	08 il 05	DATE 08. ((. a5	DATE 08/11/05	DATE 08/4/05	

SHEET 2 MODIFY -13 PLUG AS SHOWN:

IS:

D3492-XX PLUG MACHINING DETAILS



WAS:

D3492-XX PLUG MACHINING DETAILS

P/N	Α	В	С	MATERIAL SPEC
			Í.	1
				<u> </u>



Dart Aerospace Ltd

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W/O:	I/O:		WORK ORDER CHANGES							
DATE	STEP	PRO	PROCEDURE CHANGE					Approval Chief Eng / Prod Mgr	Approval QC Inspector	
				· · · · · · · · · · · · · · · · · · ·						
Part No: PAR #: _		PAR #:	Fault Categ	ory:	NCR: Yes	No DQ	A:	Date:		
			Disposition: QA			QA: N/C Closed: Date:				
NCR:			WORK ORDE	R NON-CONFORMAN	ICE (NCF	R)				
DATE	STEP	Description of NC	Corrective Action Section B			Verific	ation	n Approval	Approval	
		STEP Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Secti	Section C		QC Inspector	
									:	
			·							